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| 10/566,943 | 02/03/2006 | Takatoshi Kato | 062807-0316 | 2588 |

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| EXAMINER |
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VU, PHY ANH TRAN

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2437

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08/16/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/566,943 | Applicant(s) KATO ET AL. | |
| | Examiner PHY ANH VU | Art Unit 2437 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to an amendment filed 6/7/2010.

Response to Arguments

Applicant's arguments with respect to claim 1 has been considered but are moot in view of the new ground(s) of rejection.

Examiner Notes

Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser (US 6,895,502 B1), and further in view of Lin (US 2004/0236556 A1-hereinafter Lin).

Regarding claim 1, Fraser discloses a remote access system comprising:
a server (*Fig. 1, element 12; Col 5, lines 8, 58; host computer or server*);
a client (*Fig. 1, element 14; Col 5, line 8; Col 8, line 38, client computer*);
device for conducting remote access to the server via a communication channel constituted between the client device and the server (*Fig. 1, element 15; Col 8, lines 38-43, LAN or WAN; Internet*); and

a storage medium comprising an anti-tampering memory area for storing authentication information used to constitute the communication channel and conduct the remote access (*Col 9, lines 7-9, 37-54; Col 11, lines 25-27; Nonvolatile storage (e.g., hard disk) and tamper-resistant packaging, which corresponds to anti-tampering memory area that contains private key of the client user*); and a non-volatile memory area for storing a program (*Col 8, line 64-67; Col 9, lines 1-6, the program memory stores program which is executed in ROM to protect from unauthorized modification*), the storage medium being connected to the client device (*Fig. 1, lines 12-16; wherein the smart card which corresponds to the storage medium is being connected to the client computer via a communication medium or pathway; also see "Response to Arguments" above*),

wherein

the storage medium comprises a common interface to be used by the client device to access each of the anti-tampering memory area and the non-volatile memory area (*Fig 1, element 20; Col 9, lines 55-60; Reader*) and

the client device is configured to: (*Fig. 1, element 14; Col 7, lines 30-31; Col 8, line 38; terminal or computer*)

access the anti-tampering memory area and the non-volatile memory area via the common interface in the storage medium in response to a plurality of access requests (*Fig 1, element 20; Col 9, lines 37-60; wherein responses to commands (a plurality of access requests) are communicated between the smartcard and client device via the reader of the smartcard*) ,

the common interface being configured to issue responses to the plurality of access requests,

constitute the communication channel between the client device and the server by executing a program stored in the non-volatile memory area and by using the authentication information stored in the anti-tampering memory area (*Col 12, lines 4-20, wherein a communication channel is established between server and client device*)

conduct remote access to the server via the communication channel (*Fig. 1, element 15; Col 8, lines 38-43; internet*).

Fraser does not explicitly disclose the common interface being configured to issue a plurality of sequential responses to each of the plurality of access requests,

an access for the non-volatile memory area being arranged to be saved when the access request for the non-volatile memory area is made before a last response of the plurality of sequential responses to a previous access request, and the access for the non-volatile memory area being performed after the last response to the previous access request .

However, Lin discloses a plurality of sequential responses to each of the plurality of access requests ([0071][0084]), and an access for the non-volatile memory area being arranged to be saved when the access request for the non-volatile memory area is made before a last response of the plurality of sequential responses to a previous access request, and the access for the non-volatile memory area being performed after the last response to the previous access request ([0084][0093]) .

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the features disclosed by Lin into the system of Fraser to provide for an effective job management method in an orderly manner.

Regarding claim 5, Fraser also discloses the remote access system according to claim 1, wherein the client device is configured to store temporary data generated when executing a program in the client device, in the non-volatile memory area of storage medium (*Col 8, lines 59-63; RAM*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser, and Lin.

Regarding claim 2, Fraser discloses the remote access system according to claim 1, wherein when access to the non-volatile memory area and access to the anti-tampering memory area conducted via the common interface in the storage medium compete with each other the client device is configured to control the competition (*Col 6, lines 40-53, wherein client device accesses a resource. This implies that the client device has the capabilities to control which area of the resource it accesses first*)

It is also obvious to one of ordinary skill in the art that when there are conflicting accesses to a common resource in a computer system that does not support parallel accesses, the computer system must have a mechanism that lines up the requests to access the resource, so that only one request will be executed at a time. Request with higher priority will be given access first.

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate this feature into the teachings of Fraser and Lin because

Art Unit: 2437

it would provide for higher security in accessing the host computer or server (Col 4, lines 64-67; Col 5, lines 1-4).

Regarding claim 3, Fraser also discloses the remote access system according to claim 2, wherein the client device is configured to control the competition by conducting access to the non-volatile memory area and access to the anti-tampering memory area to be conducted via the common interface in the storage medium in a predetermined order (Col 6, lines 40-53; Col 8, lines 64-67; Col 9, lines 1-9, wherein since the client device has control over the competition, and authentication information is needed from the anti-tampering area to authenticate the client device before access to the server resource is given. Clearly, access to the anti-tampering area has priority over access to the non-volatile area, thus the anti-tampering area will be accessed first. This shows the predetermined order of accessing to the memory areas of the storage medium)

It is also obvious to one of ordinary skill in the art that when there are conflicting accesses to a common resource in a computer system that does not support parallel accesses, the computer system must have a mechanism that lines up the requests to access the resource, so that only one request will be executed at a time. Request with higher priority will be given access first.

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate this feature into the teachings of Fraser and Lin because it would provide for higher security in accessing the host computer or server (Col 4, lines 64-67; Col 5, lines 1-4).

Regarding claim 4, Fraser also discloses the remote access system according to claim 3, wherein the client device is configured to control the competition by executing access to the anti-tampering memory area to be conducted via the common interface in the storage medium in preference to access to the non-volatile memory area (Col 6, lines 40-53; Col 8, lines 64-67; Col 9, lines 1-9, 37-54, wherein in order for the client device to have access to the server resources, the client device must first be authorized using the authentication information stored in the anti-tampering area. This clearly shows that access to the anti-tampering memory area has higher priority than access to the non-volatile area, thus access to the anti-tampering should be accessed in preference to access to the non-volatile area)

It is also obvious to one of ordinary skill in the art that when there are conflicting accesses to a common resource in a computer system that does not support parallel accesses, the computer system must have a mechanism that lines up the requests to access the resource, so that only one request will be executed at a time. Request with higher priority will be given access first.

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate this feature into the teachings of Fraser and Lin because it would provide for higher security in accessing the host computer or server (Col 4, lines 64-67; Col 5, lines 1-4).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser, Lin, and further in view of Knegendorf et al (US 2003/0040929 A1, hereinafter Knegendorf).

Regarding claim 6, Fraser discloses the remote access system according to claim 1, wherein the non-volatile memory area in the storage medium is configured so as to be able to be accessed by the client device faster than the anti-tampering memory area (*Col 9, lines 1-9, wherein accessing to ROM is faster than accessing to anti-tampering memory area i.e. hard disk*)

Fraser does not disclose the storage medium retains a copy of the authentication information stored in the anti-tampering area, in the non-volatile memory area in the storage medium and the client device is configured to utilize the copied authentication information instead of the authentication information stored in the anti-tampering area.

However, Knegendorf discloses copying content data from one storage area (*nonvolatile*) to another storage area (*volatile*) and the user utilizes the copied content data (*volatile*) instead of the original content data ([0145], *this is because storing data in a volatile memory makes access to data faster*). *It is also known in the art to retain a copy of the information in the non-volatile area because accessing data from a faster volatile memory involves the risk of information loss in case of a power outage or volatile memory failure, so it is common practice to keep a copy of data in a non-volatile memory while the information is accessed from the faster volatile memory*)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify this feature of Knegendorf into the teachings of Fraser and Lin because it would provide for faster access to the information ([0145]).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser, Lin, and further in view of Ugajin (US 5,652,892).

Regarding claim 7, Fraser discloses the remote access system according to claim 1 (*Fig. 1, remote access system*),

Fraser does not disclose a controller connected to the server and the client device to manage a power supply of the server, wherein the client device is configured to access the controller and conducts power supply management of the server to be subject to the remote access.

However, Ugajin discloses a controller connected to the server and the client device to manage a power supply of the server (*Figs. 9 & 10*), wherein the client device accesses the controller and conducts power supply management of the server to be subject to the remote access (*Figs. 9 & 10; Col 6, lines 28-34, wherein the client device controls the power source of the server*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Ugajin into the teachings of Fraser and Lin because it would provide for a remote power source control method and apparatus

Art Unit: 2437

capable of controlling remote power sources independently of network architectures.

(Col 1, lines 60-63)

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fraser, Lin, and further in view of Gould et al (US 6,920,561 B1, hereinafter Gould).

Regarding claim 8, Fraser discloses the remote access system according to claim 1, wherein the storage medium is connected to the client device (*Fig. 1, lines 12-16; wherein the smartcard which corresponds to the storage medium is being connected to the client computer via a communication medium or pathway*),

client device for conducting remote access to the server via a communication channel constituted between the client device and the server (*Fig. 1, elements 14, 15; Col 5, lines 8; Col 8, lines 38-43, LAN or WAN; Internet*);

remote access conducted by the client device using the communication channel (*Fig. 1, element 15; Col 8, lines 38-43; internet*).

Fraser does not disclose the client device deletes information concerning the remote access.

However, Gould discloses the client device deletes information concerning the remote access (*Col 5, lines 44-47, wherein, the user credentials are deleted by the client device at the end of the session, which implies that communication is finished, and the connection between the client device and storage medium is canceled*).

Art Unit: 2437

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Gould into the teachings of Fraser and Lin because it would provide for the benefits and advantage of having a centralized entity to manage and control of all identification and credentials services (*Col 5, lines 48-64*).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHY ANH VU whose telephone number is (571)270-7317. The examiner can normally be reached on Mon-Thr 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2437

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PHY ANH VU/
Examiner, Art Unit 2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437